

FIG. 1MTSP1

MNRIVQFGVSAVAAAAIGIGAGSGIAAAFDGEDEVTPGDADRARAAAVQAVPGGTAGEVE
TETGEGAAAYGVLVTRPDGTRVEVHLDRDFRVLDTPEADGDGG*

MTSP2

MRLSLTALSAGVGAVAMSLTVGAGVASADPVDVAVINTTCNYGQVVAALNATDPGAAAQFN
ASPVAQSYLRNFLAAPPQPORAAMAAQLQAVPGAAQYIGLVESVAGSCNNY*

MTSP3

MFTGIA SHAGALGAALVVLIGAAILHDGPAAADPNQDDRFLALLEKKEIPAVANVPRVID
AAHKVCRKLDGGMPVNDIVDGLRNDAYNIDPVMRLYPVRLTTTMTRFISA AVEIYCPNHH
SKMAFAMANFEPGSNEPTHRVAASTRSVNSGSDLRASVSDMTIMSPGWREPTGAMLASV
LGAVRAGDPLIPNPPPIPVPPPAQAQTLIPPPPIVAPPPRPAPPQQPPPPPEVEPPAGV
PQSGGAAGSGGAGSGGGGGGDGPVEPSPARPMPPGFI RLAP*

MTSP4

MTRLIPGCTLVGLMLTLLPAP TSAAGSNTATTLPVDEVTOLEHTFLDCHPNGSCDFVA
GANLRTPDGPTGFPPLWARQTTEIRSTNRLAYLDAHATSQFERVMKAGGSDVITTVYFG
EGPPDKYQTTGVIDSTNWS TGQPMTDVNVI VCTHMQVVYPGVNLTSPSTCAQANFS*

MTSP5

MVLR SRKSTLGVVCLALVLGGPLNGCSSSASHRGPLNAMGSPAIPSTAQEIPNPLRGQY
EDLMEPLFPQGNPAQQRYPPWPASYDASLRVSWRQLQPTDPRTLPPDAPDDRKYDFSVID
NALTRLADRGMLTLRVYAYSSCCKASYPDGTNIAIPDWERAIASNTSYPGPATDPSTG
VVQVVPNFNDSTYLNDFAQLLAALGRRYDGDRLSVFEFSGYGDFSENHVAYLRDTLGAP
GPGPDES VATLGYYSQFRDQNTTASIKQLIAANVSAFPHTQLVTSPANPEIVRELFAD E
VTNKLAAPVGVRSDCLGVDAPLPWAESSTSHYVQTKDPVVAALRQRLATAPVIT EWC E L
PTGSSPRAYYEKGLRDVIRYHVSMTSSVNFDPQTATSPMDPALYL VWAQANAAAGYRYSV
EAQPGSQALAGKVATISVTWTNYGAAAATEKWVPGYRLVDSTGQVVRTLPAAVDLKTLVS
DQRGDRSSDQPTPASVAETVRVDLSGLPAGHYTLRAAIDWQHKPNGSHVVNYPPMLLSR
DGRDDSGFY PVATLDIPRDAQTAVNAS*

MTSP6

MSRLLALLCAAVCTGCVAVVLAPVSLAVVNPWFAN SVGNATQVVS VVG TGGSTAKMDVYQ
RTAAGWQPLKTGITTHIGSAGMAPEAKSGYPATPMGVYSLDSAFGTAPNPGGGLPYTQVG
PNHWWSGDDNSPTFNSMQVCQKSQCPFSTADSENLOIPQYKHSVVMGVNKA KVPKGSAF
FFHTTDGGPTAGCVAID DATLVQIIRWLRPGAVIAIAK*

MTSP7

MIRELVTTAAITGAAIGGAPVAGADPQRYDGDVPGMNYDASLGAPCSSWERFI FGRGPSG
QAEACHFPFPNQPFP AETGYWVISYPLYGVQVQVGAPCPKPQAAAQSPDGLPMLCLGARGW
QPGWFTGAGFFPPEP*

FIG. 1 (continued)MTSP8

MGELRLVGGVLRVLVVVGAVFDVAVLNAGAASADGPVQLKSRLGDVCLDAPSGSWFSPLV
INPCNGTDFQRWNLTDDRQVESVAFPGECVNIGNALWARLQPCVNWISQHWTVQPDGLVK
SDLDACLTVLGGPDPGTWVSTRWCDPNAPDQQWDSVP*

MTSP9

MPAMTARSVVLSVLLGAHPAWATASELIQLTADFGIKETTLRVALTRMVGAGDLVRSADG
YRLSDRLLARQRRQDEAMRPRTRAHWGNWHMLIVTSIGTDARTRAALRTCMHHKRFGE LR
EGVWMRPDNLDDLDESVAARVRMLTARDEAPADLAGQLWDLSGWTEAGHRLLDGMAAAT
DMPGRFVVAAMVRHLLTDPMLPAELLPADWPGAGLRAAYHDFATAMAKRRDATQLLEVT
*

MTSP10

VPAGVGNASGSVLDMTSVRTVPSAVALVTFAGAALSGVI PAIARADPVGHQVITYTPTTTS
DLMANIRYMSADPPSMAAFNADSSKYMITLHTPIAGGQPLVYTATLANPSQWAIVTASGG
LRVNPEFHCEIVVDGQVVVSQDGGSGVQCSTRPW*

MTSP11

MTTSKIATAFKTATFALAAGAVALLASPADAAAGTMYGDPAAAAKYWRQQTYYDDCVLMS
AADVIGQVTGREPSERAI IKVAQSTPSVVHPGSIYTKPADAHPNSGMGTSVADIPTLLA
HYGVDAVITDEDHATATGVATGMAALEQYLGSGHAVIVSINAEMIWGQPVEETDSAGNPR
SDHAVVVTGVDTENGIVHLNDSGTPTGRDEQIPMETFVEAWATSHDFMAVTT*

MTSP12

MGVIARVVGVAACGLSLAVLAAAPTAGAEPTGALPPMTSSSGSGPVI GDGDAALRQRI SQQ
LFSFGDPTVQEVGDSDAAQFI TAAAVADRVDASVFLPLQRVLGCQONTAGSGAGFGARA
YRRTDGQWGGAMLVVAKSTVSDVDALKACVKSGWRKATAGTPTSMCNNGWYTPPFADTRR
GEEGYFVLLAGTASDFCSAPNANYRTTASSWPG*

MTSP13

MRLKPAPSPAAAFVAGLILAGWAGSVGLAGADPEPAPT PKTAIDSDGTYAVGIDIAPGT
YSSAGPVGDGTCYWKRMGNPDGALIDNALS KKPQVVTIEPTDKAFKTHGCQPWQNTGSEG
AAPAGVPGPEAGAQLQNQLGILNGLLGPTGGRVPQP*

MTSP14

MITNLRRRTAMAAAGLGAALGLGILLVPTVDAHLANGSMSEVMMSEIAGLPIPPIIHYGA
IAYAPSGASGKAWHQRTPARAEQVALEKCGDKTKVVSFRFTRCGAVAYNGSKYQGGTGLT
RRAAEDDAVNRLEGGRI VNWACN*

MTSP15

VTVLLDANVLIALVVAEHVHDAADWLMASDTGFATCPMTQGSLVRFLVRSGQSAAAAR
DVVSAVQCTSRHEFWPDALS FAGVEVAGVVGHRQVTDAYLAQLARSHDGQLATLD SGLAH
LHGDVAVLIPTTT*

FIG. 1 (continued)MTSP16

VQRQSLMPQQT LAAGVFV GALLCGVVTA AVPPHARADV VAYLVNVTVRPGYNFANADAAL
SYGHGLCEKVS RGRPYAQII ADVKADF DTRDQYQASYLLS QAVNELCPALI WQLRNSAVD
NRRSG*

MTSP17

VRSYLLRIELAD RPSGLGSLA VALGSVGADILSLD VVERGNGYAIDDLVVELPPGAMPDT
LITAAEALNGVR VDSVRPHTGLLEAHRELELLDHVAAA EGATARLQVLVNEAPRVLRVSW
CTVLRSSGGELH RLAGSPGAPETRANSAPWLP IERAAALDGGADWVPQAWRDMDTTMVAA
PLGDTHTAVVLGR PGPEFRPSEVARLGYLAGIVATMLR*

MTSP18

MPDGEQSQPPAQ EDAEDDSRPDAAEAAAAEPKSSAGPMFSTYGIASTLLGVLSVA AVVLG
AMIWSAHRDDSGERTYL TRVMLTAAEWTA VLINMNADNIDASLQRLHDGTVGQLNTDFDA
VVQPYRQVVEKL RTHSSGRIEAVAIDTVHRELD TQSGAARPVVTTKLPPFATR TDSVLLV
ATSVSENAGAKPQ TVHWNLRDLVSDVDGKLMISRLESIR*

MTSP19

MKMVKSLAAGLT AAAAIGAAAAGVTSIMAGGPVVYQM QPVVFGAPLPLDPASAPDVPTAA
QLTSLNLSLADPNV SFANKGSLVEGGIGGTEARIADHKLK KAAEHGDLPLSFSVTNIQPA
AAGSATADVSVSGPKL SSPVTQNVTFVNQGGWMLSRASAMELLQAAGN*

MTSP20

MNLRRHQTLTLRL LAASAGILSAAAFAPAQANPVDDAFIAALNNAGVNYGDPVDAKALG
QSVCPILAEPPGGSFNTAVASVVARAQGMSQDMAQTFTSIAI SMYCPSVMADVASGNLPAL
PDMPLPGS*

MTSP21

MRVVSTLLSIPLMIGLAVPAHAGPSGDDAVFLASLERAGITYSHPDQAIASGKAVCALVE
SGESGLQVVNELRTRNPGFSMDGCCKFAAISAHVYCPHQITKTSVSAK*

MTSP22

MARTLALRASAGLVAGMAMAAITLAPGARAETGEQFPGDGVFLVGTDIAPGTYRTEGPSN
PLILVFGRVSELSTCSWSTHSAPEVSNENIVDTNTSMGPM SVVIPPTVA AFQTHNCKLWM
RIS*

MTSP23

MLSPLSPRIIAAFTTAVGAAAIGLAVATAGTAGANTKDEAFIAQMESIGVTFSSPQVATQ
QAQLVCKKLASGETGTEIAEEVLSQTNLTTKQAAYFVVDATKAYCPQYASQLT*

FIG. 1 (continued)MTSP24

MTTMITLRRRFAVAVAGVATAAATTVTTLAPAPANAADVGAIAYSNGNSWGRSWDYPTRA
AAEATAVKSCGYSDCKVLTSFTACGAVAANDRAYQGGVGPTLAAAMKDALTCLGGGYIDT
WACN*

MTSP25

MTPGLLTAGAGRPRDRCARIVCTVFIETAVVATMFVALLGLSTISSKADDIDWDAIAQC
ESGGNWAANTGNGLYGGLQISQATWDSNGGVGSPAAASPQQQIEVADNIMKTQGPAGWP
CSSCSQGDAPLGLSLTHILTLFLAAETGGCSGSRDD*

MTSP26

VQGAVAGLVFLAVLVIFAIIVVAKSVALIPQAEAAVIERLGRYSRTVSGQLTLLVPFIDR
VRARVDLRERVVSFPQPVITEDNLTLNIDTVVYFQVTPQAAVYEISNYIVGVEQLTTT
TLRNVVGGMTLEQTLTSRDQINAQLRGVLDEATGRWGLRVARVELRSIDPPPSIQASMEK
QMKADREKRAMILTAEGTREAAIKQAEQKQQAQILAAEGAKQAAILAAEADRQSRMLRAQ
GERAAAYLQAQGOAKAIEKTFAAIKAGRPTPEMLAYQYLQTLPEMARGDANKVWVPSDF
NAALQGFTRLLGKPGEDGVFRFEPSPVEDQPKHAADGDDAEVAGWFSTDTDPSIARAVAT
AEAIARKPVEGSLGTPPRLTQ*

MTSP27

LQTAHRRFAAAFAAVLLAVVCLPANTAAADDKLPLGGGAGIVVNGDTMCTLTITIGHDKNG
DLIGFTSAHCGGPGAQIAAEGAENAGPVGIMVAGNDGLDYAVIKFDPKVTPVAVFNGFA
INGIGPDPSFGQIACKQGRITGNSCGVTWGPGESPGTLVMQVCGGPGDSDGAPVTVDNLLV
GMIHGAFSDNLPSCITKYIPLHTPAVVMSINADLADINAKNRPGAGFVPVPA*

MTSP28

MLMPEMDRRRMMMAGFGALAAALPAPTAWADPSRPAAPAGPTPAPAAPAAATGGLLFHD
EFDGPAGSVDPDSKWQVSNHRTPIKNPVGFDRPQFFGQYRDSRQNVFLDGNLNLVLRATR
EGNRYFGGLVHGLWRGGIGTTWEARIKFNCCLAPGMWPAWWSNDDPGRSGEIDLIEWYGN
GTWPSGTTVHANPDGTAFETCPIGVDGGWHNWRVTWNPSGMYFWLDYADGIEPYFSVPAT
GIEDLNEPIREWPFNDPGYKVFVPLNLAVGGSGGGDPATGSYPQEMLVDWVRVF*

MTSP29

VHRRALKLPLLLAAGTVLGQAPRAAAEEPGRWSADRAHRWYQAHGWLVGANYITSNAIN
QLEMFQPGTYDPRRIDNELGLARFHGFNTVRVFLHDLWLAQDAPGFQTRLAQFVAIAARY
HIKPLFLVLFDSWDPLPRPGRQRAPRAGVHNSGWVQSPGAERLDDRRYASTLYNYVTGVL
GQFRNDDRVLGWDLWNEPDNPARVYRKVERKDKLERSVAELLPOVFRWARTVDPVQPLTSG
VWQGNWGDPRRSTISAIQLDNADVITFHSYAAPAEFEGRIELAPLQRPILCTEYLARS
QGSTVEGILPIAKRHNVGAFNWGLVAGKTQTYLPWDSWDHPYRAPPKVWFHDLHPNGRP
YRDGEVQTIRKLNGMPSQD*

MTSP30

VSTYGWRAYALPVLMLVLTTVVVYQTVTGTSTPRPAAQTVRDSIPAIGVVGTAILDAPPRG
LAVFDANLPAGTLPDGGPFTEAGDKTWRVVPGTTPQVGQGTVKVFRYTVEIENGLDPTMY
GGDNAFAQMVDQTLTNPKGWTHNPQFAFVRIDSGKPDFRISLVSPPTTVRGCGYEFRLET
SCYNPSFGGMDRQSRVFINERWVRGAVPFEGDVGSYRQYVINHEVGHAIGYLRHEPCDQ
QGGLAPVMMQQTFFSTSNDDAAKFDPDFVKADGKTCRFPWPYPPI*

FIG. 1 (continued)MTSP31

MRPYYIAIVGSGPSAFFAAASLLKAADTTEDLDMAVDMLEMLPTPWGLVRSVAPDHPKI
 KSISKQFEKTAEDPRFRFFGNVVVEHVQPGELSERYDAVIYAVGAQSDRMLNIPGEDLP
 GSIAAVDFVGVWYNAHPHFQVSPDLGSAVVIGNGNVALDVARILLTDPDVLARTDIAD
 HALESLRPRGIQEVVIVGRRGPLQAFTTLELRELADLDGVDVVIDPAELDGITDEDA
 VVKVCKQNIKVLRGYADREPRPGHRRMVFRFLTSPIEIKGKRKVERIVLGRNELVSDGSG
 RVAAKDTGEREELPAQLVVRVSVGYRGVPTPGLPFDDQSGTIPNVGGRINGSPNEYVVGWI
 KRGPTGVI GTNKKDAQDVTDTLIKNLGNAKEGAECKSFPEHDADQVADWLAARQPKLVTS
 AHWQVIDAFERAAGEPHGRPRVKLASLAELLRIGLG*

MTSP32

VTNPPWTVDVVVVGAGFAGLAAARELTRQGHEVLVFEGRDRVGGSLTGRVAGVPADMGG
 SFIGPTQDAVLALATELGIPPTPHRDGRNVIQWRGSARSYRGTI PKLSLTGLIDIGRLR
 WQFERIARGVPVAAPWDARRARELDDVSLGEWLRLVRATSSSRNLMAIMTRVTWGCEPDD
 VSMLHAARYVRAAGGLDRLLDVKNGAQQDRVPGGTQQIAQAAAAQLGARVLLNAAVRRID
 RHGAGVTVTSDQGQAEAGFVIVAI PPAHRVAIEFDPLPPEYQQLAHHWPOGRLSKAYAA
 YSTPFWRASGYSGQALSDEAPVFITFDVSPHADGPGILMGFVDARGFDSLPIEERRDAL
 RCFASLFGDEALDPLDYVDYRWGTEEFAPGGPTAAVPPGSWTKYGHWLREPVGPIHWAST
 ETADEWTGYFDGAVRSGQRAAAEVAALL*

MTSP33

MKGTKLAVVVGMTVAAVSLAAPAQADDYDAPFNNTIHRFGIYGPQDYNWLAKISCERLS
 RGVGDGDAYKSATFLQRNLPRGTTQGOAFQFLGAAIDHYCPEHVGVLQRAGTR*

MTSP34

MKALVAVSAVAVVALLGVSSAQADPEADPGAGEANYGGPPSSPRLVDHTEWAQWGSLSLSL
 RVYPSQVGRASRRLGMAAADAAWAEVLALSPEADTAGMRAQFICHWQYAEIRQPGKPSW
 NLEPWRPVVDDSEMLASGCNPGSPSEESF*

MTSP35

MSGHRHKPTTSNVSVAKIAFTGAVLGGGGIAMAAQATAATDGEWDQVARCESGGNWSINT
 GNGYLGGLQFTQSTWAAHGGGEFAPSQQLASREQQIAVGERVLATQGRGAWPVCGRGLSN
 ATPREVLPAASAMDAPLDAAAVNGEPAPLAPPPADPAPPVELAANDLPAPLGEPLPAAPA
 DPAPPADLAPPAPADVAPPVELAVNDLPAPLGEPLPAAPADPAPPADLAPPAPADLAPPA
 PADLAPPAPADLAPPVELAVNDLPAPLGEPLPAAPAE LAPPADLAPASADLAPPAPADLA
 PPAPAE LAPPAPADLAPPAVNEQTAPGDQPATAPGGPVGLATDLELPEPDPQPADAPPP
 GDVTEAPAETPQVSNIAYTKKLWQAIRAQDVCGNDA LSLAQPYVIG*

MTSP36

MSGHRKKAMLALAAASLAATLAPNAVAAEPSWNGQYLVTL SANAKTGTSMANRPEYPH
 KANYTFSSRCASDVCIATVVDAPPPKNEFI PRPIEYTWNGTQWVREISWQWDCLLPDGTI
 EYAPAKSITAYTPGQYGILTGVFHTDIASGTCKGNVDMPVSAKP IVG*

FIG. 1 (continued)MTSP37

MRYLIATAVLVAVVLVGWPAAGAPPSCAGLGGTVQAGQICHVHASGPKYMLDMTFPVDYP
DQQALTDYITQNRDGFVNVAQGSPLRDQPYQMDATSEQHSSGQPPQATRSVVLKFFQDLG
GAHPSTWYKAFNYNLATSQPITFTDLFVPGTTPLDSIYPIVQRELARQTGFGAAILPSTG
LDPAHYQNFAITDDSLIFYFAQGELLPSFVGACQAQVPRSAIPPLAI*

MTSP38

LKNARTTLIAAAIAGTLVTTSPAGIANADDAGLDPNAAAGPDAVGFDPNLPPAPDAAPVD
TPPAPEDAGFDPNLPPPLAPDFLSPPAEEAPPVPVAVSVNWDIAIAQCESGGNWSINTGNG
YYGGLRFTAGTWRANGSGSAAANASREEQIRVAENVLRSQGIRAWPVCGRG*

MTSP39

MSTIFDIRSLRLPKLSAKVVVVGGGLVVVLAVVAAAAGARLYRKLTTTTVVAYFSEALALY
PGDKVQIMGVRVGSIDKIEPAGDKMRVTLHYSNKYQVPATATASILNPSLVASRTIQLSP
PYTGGPVLQDGAVIDPIERTQVPVEWDQLRDSINGILRQLGPTERQPKGPFGLIESAADN
LAGKGRQLNETLNSLSQALTALNEGRGDFVAITRSLALFVSALYQNDQQFVALNENLAEF
TDWFTKSDHDLADTVERIDDLVLTGRKFVSDNRSVLAADVNNLADATTTLVQPEPRDGL
TALHVLPTYASNFNNLYYPLHSSLVGQFVFPNFANPIQLICSAIQAGSRLGYQESAECA
QYLAPVLDALKFNYLPFGSNPFSSAATLPKEVAYSEERLRPPPGYKDTTVPGIFSRDTPF
SHGNHEPGWVAPGMQGMQVQFPTANMLTPESLAELLGGPDIAPPPPTNLPGPPNAYDE
SNPLPPPWPQPASLPAAGATGQPGPGQ*

MTSP40

MKRSMKSGSFAIGLAMMLAPMVAAPGLAAADPATRPVDYQQITDVVIARGLSQRGVPFWSW
AGGGISGPTRGTGTGINTVGFDASGLIQYAYAGAGLKLPRSSGQMYKVGQKVLPOQARKG
DLIFYGPEGTQSVALYLGKGQMLEVGDVVQVSPVRTNGMTPYLVRLVLTGTOPTPVQQAPVQ
PAPVQQAPVQQAPVQQAPVQQAPVQQAPVQQAPVQQAPVQQAPVQQAPVQQAPVQQAPVQPPFGTARSR*

MTSP41

MFTRRFAASMVGTTTLTAATLGLAALGFAGTASASSTDEAFLAQLQADGITPPSAARA IKD
AHAVCDALDEGHSKAVIKAVAKATGLSAKGAKTFAVDAASAYCPQYVTSS*

MTSP42

MAAMWRRRPLSSALLSFGLLLGGLPLAAPPLAGATEEPGAGQTPGAPVVAPQQSWNSCRE
FIADTSEIRTARCATVSVVDYDQPGGTQAKLAVIRVPATGQRFGALLVNPGGPGASAVD
MVAAMAPAIADTDILRHFDLVGFDPRGVGHSTPALRCRTDAEFDAYRRDPMADYSPAGVT
HVEQVYRQLAQDCVDRMGFSFLANIGTASVARDMDMVRQALGDDQINYLGYSGTELGTA
YLERFGTHVRAMVLDGAIDPAVSPIEESI SQMAGFQTAFNDYAADCARS PACPLGTDSAQ
WVNRYHALVDPLVQKPGKTS DPRGLSYADATTGTINALYSPQRWKYLTSGLLGLQRGSDA
GDLLVLADDYDGRDADGHYSNDQDAFNAVRCVDAPTPADPAAWVAADQIRIQVAPFLSYG
QFTGSAPRDL CALWPVPATSTPHPAAPAGAGKVVVVSTTHDPATPYQSGVDLARQLGAPL
ITFDGTQHTAVFDGNQCVDSAVMHYFLDGTLPPTSLRCAP*

FIG. 1 (continued)MTSP43

MKTGTATRRRLAVLIALALPGAALLAEPSATGASDPCAASEVARTVGSVAKSMGDY
LD SHPETNQVMTAVLQQQVGP GSVASLKAHFEANPKVASDLHALSQPLTDLSTRCSLPIS
GLQAI GLMQAVQGARR*

MTSP44

MSRLSSILRAGAAFLVLGIAAATFPQSAAADSTEDFPIPRRMIATTCDAEQYLA AVRDT S
PVYYQRYMIDFNNHANLQQATINKAHWFFSLSPAERRDYSEHFYNGDPLTF AWVNHMKIF
FNNKGVVAKGTEVCNGYPAGDMSVWNWA*

MTSP45

VTKRTITPMTSMGDLLGPEPILLPGDSDAEAE LLANESPSIVAAAHPSASVAWAVLAEGA
LADDKTVTAYAYARTGYHRGLDQLRRHGWKGFGVPYSHQPNRGFLRCVAALAAAAAIG
ETDEYGRCLDLLDDCDPAARPALGL*

MTSP46

VIIIPDINLLLYAVITGFPQHRRAHAWWQDTVNGHTRIGLTYPALFGFLRIATSARVLAAP
LPTADAIAYVREWLSQPNVDLLTAGPRHLDIALGLLDKLG TASHLT TDVQLAAYGIEYDA
EIHSSDTDFARFADLKWTDPLRE*

MTSP47

LTDPRHTVRIAVGATALGV SALGATLPACSAHSGPGSPPSAPSAPAAATVMVEGHTHTIS
GVVECRTSPAVRTATPSESGTQTTRVNAHDDSASVTL SLSDSTPPDVNGFGISLKIGSVD
YQMPYQPVQSPTQVEATRQGSYTLTGTHAVIPGQTGMREL PFGVHVTC P*

mtspl

mtsp2mtsp3mtsp4

8 / 24

FIG. 2 (continued)mtsp5

atgggttttaagaagtaggaaaagcacgctcggcggttgctcgtgtgcttagc
gctgggtgctcgggtgggcccgtcaacgggtgcagcagcagcgcgagccacc
gcggtccactgaacgcaatgggaagtcgggccataccgtcgacggcgag
gagataaccaaacccggttgccggtcagtagaagacctcatggaaccgct
gtttccgcaggggaaccccgccgagcaacgctatccgccttgcccgcgt
cctacgcagcgagtttgcgagtctcctggcggcagctgcagcctacggat
ccgcgcactctgccccggatgctccggacgaccgcaagtacgacttcag
cgtgatcgacaacgcggtgaccaggctcgccgaccgcggcatgcggctga
cgctgcgggtgtacgcctacagctcgtgctgcaaggcttcctatccggac
ggcactaacatcgcgattcccgaactgggagcgcgctatcgccagcaccaa
caccagttatccagggccggcgaccgatccctcgaccgggggtggtgcagg
tggtgccgaatttcaacgattcgacctatcttaacgattttgcgagttg
ctcgccgcgcttggtcgccgctacgacggtgacgagcgcctcagcgtgt
cgagttctccgggtacggggacttcagcgaaaatcacgtcgcatacctgc
gcgacacgctcgggtgcgcgggtccgggcccggatgaaagcgtggcgacc
ctgggctattacagccagttccgtgatcagaacatcaccaccgcgtccat
caaacagctaatacgcggcgaacgtcagcgccttcccgcatacccaactgg
tgaccagtcccgcctaataccggaaatcgtgcgagaactgttcgcccagcag
gtcaccaacaagcttgccgcgcgggtgggtgtccgctcggattgcctggg
cgtcgacgcgcgcttgccggcctgggcccaggtccagcacttcgcactatg
tgagaccaaaagacccgggtgggtgcgcgcgctgcggcagcggctggcaacg
gcgcgggtgatcaccgagtggtgcgagttgccgaccggcagttcgccgcg
ggcttactacgagaaggccctgcgcgacgtcatcaggtatcacgtgtcga
tgacgtcgagcgttaacttccccgaccagacggcgacctcgccgatggac
cccgcgttgtagctggtgtgggcgcaagctaaccgcgcgcgaggctatcg
gtactcgggtcgaagcgcagccggggtcgcaagcgttagcgggcaaggctcg
cgacgatctcgggtcacctggaccaactacggcgctgctgccgccaccgaa
aagtgggtgcccgggtaccggctggtggattccaccggacaggtggttcg
gacgctgccggcagcgggtggacctgaagacgctggtctccgaccagcgcg
gcgatcgacgagcgcgaccagccgacaccggcgctcggtcgcccagacgggt
cgcggtgatctgtccggcttgcccgcgggcccactacacgctgcggggcgc
gatcgactggcaacagcacaaaccgaacggctcccatgtggtgaactatc
cgcccatgctgtgtcccgcgacggccgcgacgattccgggttttatccc
gtcgccacgctcgacatcccacgcgacgcgcgacaccgcgggtcaacgcttc
gtag

mtsp6

atgagccgactcctagctttgctgtgcgctgcgggtatgcacggggtgcgt
tgctgtggttctcgcgccagtgagcctggccgctcgtcaaccctggttcg
cgaactcggtcggcaatgccactcaggtggtttcgggtggtgggaaccggc
gggttcgacggccaagatggatgtctaccaacgcaccgcgcgggctggca
gccgctcaagaccggtatcaccacccatcgggttcggcgggcatggcgc
cggaagccaagagcggatcaccggccactccgatgggggtttacagcctg
gactccgcttttggcaccgcgcgcaatcccgggtggcggggttgccgtatac
ccaagtccgacccaatcactggtggagtggcgacgacaatagccccact
ttaactccatgcaggtctgtcagaagtcccagtgcccgttcagcacggcc
gacagcgagaacctgcaaatcccgcagtagaagcattcggctcgtgatggg
cgtcaacaaggccaaggtcccaggcaaggtccgcgcttcttctttcaca
ccaccgacggcgggcccaccgcgggttggtgtggcgatcgacgatgccacg

FIG. 2 (continued)

ctggtgcagatcatccggttggtgcggcctggtgcggtgatcgcgatcgc
caagtaa

mtsp7

atgattcgcgaaactggtcaccaccgctgcgatcacgggtgccgcatcgg
tggggcgccagtgcggggcgagacccgcagcggttatgacggcgatgtgc
cggggatgaactatgacgcttcgctggggcgccccatgctccagctgggag
cgcttcatttttggacgagggccctccgggtcaggccgaagcctgtcattt
tccgcctcctaaccagttcccgccggccgaaaccgggtactgggtgatct
cctaccgctatacggcgctccagcaggtcggtgcgccgtgtccgaagccg
caggcggccgcgcagctctccggatgggttgccgatgctgtgtctgggagc
ccgtggatggcagccgggatggtttacggggccgggttcttccctccgg
agccataa

mtsp8

atgggtgaattacggttggtgggcggtgtgctccgggtccttgtcgtggt
cggtgcggtgttcgatgtggcggtgctaaacgccggtgcggctagtgcg
acggcccgggtccagctgaagagccgattgggcatgtttgcctggacgcc
ccgagtgggagctggttcagcccgtggtgatcaaccctgcaatgggac
cgactttcagcgctggaatctcaccgatgaccggcaggtcgagagcggtg
ccttccccggggaatgcgtgaatatcggaatgctttgtgggcgcgctg
cagccctgtgtgaactggatcagccagcactggactgtccagcccgaagg
cctggtcaagagtgatcttgatgcctgcctcacgggttctcggcgggtccgg
atcctgggacctgggtgtccaccgcgtggtgcgaccccaatgcaccgcgac
caacagtgggatatgctgcccgtaa

mtsp9

atgccggccatgaccgcccgttcgggtggtactcagcgtgctgctcggtgc
tcatcccgcgtgggcccacgcgaagcgaattgatccagctgacagcggatt
tcgggtatcaaggagacgacgttgccgggtgcgctgaccgcgatggtcggt
gcccgggatctggtccggtccgcggacggctaccggctctcggtatcggtt
gctggcccgcagcgccgacaagatgaggccatgcgcccacggacccgcg
cttggcacggaaactggcacatgctgattgtcaccagcatcggcacccgat
gctcgtaccggggccgcactgcgaacctgcatgcaccacaagcgtttcgg
tgaattgcgggaaggggtgtggatgcggccggacaatctcgacctcgact
tggagtccgacgttgccggcccgggttaggatgctgacggcccgcgacgag
gccccgcgcgacttgcccgggcagctgtgggatctgtcggggtggaccga
ggccggccaccgggtgctcggcgacatggcagcggccaccgacatgccg
ggcgatttggtggtggtgcggcgatggtgcgccacctgctcaccgatccg
atgttgcccgtgaactgttgcccgcgactggccggggcgccgggttacg
ggcggcgtaccacgacttcgccactgcaatggcgaaacgacgcgatgcaa
ctcaactcctggaggtgacatga

mtsp10

gtgccggccggcgctcggtaacgcacatccggtagcggttttagatatgacgtc
cgtgcgcacagtgccaaagcccgctgcgctggtgacgtttgccggagccg

FIG. 2 (continued)

cgctcagcgggggtcatcccggcgattgcccgcgcgatccggtcgggcat
caggtgacctacaccgtcacgaccaccagcgacctgatggccaacattcg
gtacatgagcgccgatccgcccagcatggcggtttcaatgccgattcat
cgaagtacatgattaccttgcacactccgatcgctggcggtcagccgctg
gtctataccgccacgctggcaaaccgagccagtgggcgatcgtcaccgc
cagcggcggtcgtcggtcaatccggagtccactgcgagattgttgtag
acggccaggtggtggtgcgaggacggcggcagcggcggtgcagtgcctg
actcgccctggttaa

mtsp11

atgacgaccagcaaaatcgccaccgccttcaagaccgccaccttcgcgct
ggccgcgggtgccgttgactgggattggccagccccgcccagcgcagcgg
cgggcaccatgtatggcgaccggcgagccgcccgaagtactggcgccag
cagacatacgacgactgcgtcctgatgtcgcccgcgacgtgatcggtca
agtgaaccggcagggagccttccgagcgcgccatcatcaaagtggcccagt
cgacacccagcgtcgtgcacccccgggtccatctacacaaagccggccgac
gccgagcaccggaactcgggaatgggtaccagcgtggccgacataccgac
gctgctggcgcattacggcgctcgacgcccgttatcaccgacgaggaccacg
ccacagccaccggagtcgccaccggcatggccgcccctcgagcagttatctg
ggcagcgggacgcccgtgatcgtcagcatcaacgccgagatgatctgggg
ccagcccgtcgaggaaaccgacagtgccgggaaccgcgggtctgaccacg
ccgtgggtgggtgaccgggtgcgataccgaaaacggcattgttcacctcaac
gacagcgggtacccccacggggccgacgagcagatcccgatggaaacctt
cgtcgaggcggtgggcccaccagccacgacttcatggccgtcaccacctga

mtsp12

atgggagtcattgcccgcgttgctcggtgtcgccgcgtgcgggtttgtccct
ggccgtgctggccgcgcgcccaccgcggggcgcggaacccaccggcgcg
tgccccgatgacatccagcggcagcggaccgggtcatcggcgacgggtgac
gccgcgctgcgacagcggatctcacagcagctgttagcttcggagatcc
caccgtccaggaggttgacggctcggacgcgggtcaattcatcacggccg
cagccgctgtcgcgaccgcgatgtggcgctcggtgttcttgccgctgcag
cgggtgttgggctgccaaacagaacacagccggctcgggggcccggcttcgg
ggcgcgccctaccggcgaaaccgacgggcaatggggaggcgcgatgctgg
tcgtcgccaagagcaccgtttccgacgtcgacgccctcaaggcctgcgtc
aagtccgggtggcgcaaggccacggcgggcacgcccacttcgatgtgcaa
caacgggttggaacctaccgcgcgttcgcccacaccgcgcggcggaagagg
gctatttcgtcttgctggccggcagggcctcggacttctgcagtgcgccc
aacgcgaactaccgaaccaccgcgagctcatggccgggctag

mtsp13

atgcgcttgaagccagccccatctcctgctgcagcctttgccgtcgccgg
cctgatcctcgaggctgggcccggatccgtgggcctcgccggcgccgatc
cggagccggcaccgacaccgaagacggcaattgatagcgacggcacctat
gggtggggattgacatcgctcccggcagctacagctccgcgggacccgt
cggcgacggcacctgctattggaagcggatgggtaaccccgatggcgcg
tcacgataacgcactcagcaagaaaccacaggtagtgcagattgagccg
accgacaaggcgttcaagacgcacggctgccaaacctggcagaacacggg
cagcgaaggcgctgcccctgccggagtccctggacctgaagcggggggccc

FIG. 2 (continued)

aactacaaaatcagctcggcatcctcaacggcttactcggaccgactgga
gggcgagtgcctcagccctaa

mtsp14

atgatcacaaacctccgacgcggaaccgcgatggcagccgcccggcctagg
ggctgctctcgggctgggcatcctgctgggtccgacgggtggacgcccac
tcgccaacgggttcgatgtcggaagtcatgatgtcggaattgccgggttg
cctatccctccgattatccattacggggcgattgcctatgccccagcgg
cgcgtcgggcaaagcgtggcaccagcgcacaccggcgcgagcagagcaag
tcgcactagaaaagtgcggtgacaagacttgcaaagtggtagtcgcttc
accaggtgcggcgcggtgcctacaacggctcgaaataccaaggcggaac
cggactcacgcgcgcgcggcagaagacgacgccgtgaaccgactcgaag
gcgggcggatcgtcaactgggcgtgcaactaa

mtsp15

gtgacgggtgctgctcgacgccaacgtgctgatcgcatgtggtggtcgccga
gcatgtgcatcatgatgccgcagcggactggctcatggcgtccgacaccg
gattfgcgacctgcccgatgacacaaggaagcctgggtcgattcctgggtg
cgctcgggacagtcgcgcggcgcggtcgggatgtcgtcagtcgggtcca
gtgcacgagccgccacgaattctggcccgatgcactctcttcgccgggtg
tcgaggtcgctgggtgtgggtggggcaccggcaggtgaccgatgcctacctt
gcccagctcgcgcgaagccacgacgggcagttggcgacgctcgacagcgg
cttagcacacctgcacggcgacgtcgcggtactcattccaacgaccacct
ga

mtsp16

gtgcagcgccaatcattgatgccccagcagacccttgccgcccggcggtttt
cgtgggtgcgctgctatgcggtgtcgtgacggcgggcggtgccaccacacg
cacgcgcgcgacgtgggtgcctatctgggtcaacgtgacggtagcggcgggc
tacaacttcgccaacgcccagcgcgcggttgagttacggacatggcctctg
cgagaaggtgtctcggggccgcaccttacgcacagatcatcgccgacgtca
aggctgatttcgacacccgcgaccaataaccaggcctcgtatctgctcagc
caggctgtcaacgaactctgccccgcgctgatctggcagttgcgaaactc
cgcagtcgacaatcggcgctcgggctga

mtsp17

gtgcgttcgtatctattgcgtatcgagctggccgaccggccgggagcct
tgggtcgctggcggtcgcgctcggctcgggtggcgccgacatcctctcgc
tcgacgtggtcgagcgcggcaacggctatgcgatcgacgacctgggtggtc
gaactgcccccgaggagcgatgcccagacacgctgatcactgctgccgagggc
gctgaacggcggtccgggtagacagcgtccgcccgcacaccggcctgttgg
aagcccaccgcgagctggaactgctcgatcatgtggccgcggctgagggc
gcgaccgcacgggtccaggttctgggtcaacgaggcccccggggtgctccg
gggtgagctgggtgcacgggtgttcgcaggttcggcggggagctgcaccgtc
tggccggcagcccaggtgcgcggagacccggggccaattcggcgccctgg
ctgccgatcgagcgggcccgcggcgtggacggcgggcgccgactgggtgcc
gcaagcctggcgcgacatggataccaccatggtcgcggctccattgggtg
acacgcacaccgcgggtgggtgctgggcaggccaggcccggaatttcgcccc

FIG. 2 (continued)

tccgaggtggcgcggttgggttatctagccggcatcgtggcgacgatgct
gcgctga

mtsp18

atgcctgacggggagcagagccagccaccggcccaagaagatgcggaaga
cgactcgcgggcccgacgcccggaggcccgccgcccgaacccaaatcat
cagccggtccgatgttctcgacctacggtatcgctcgacactactcggc
gtgctatcggtcgcccgggtcgtgctgggtgcgatgatctggtcgcgaca
ccgcatgactccggcgagcgtaacctgacctgacccgggtcatgctgacg
ccgctgaatggacggccggtgctgatcaacatgaacgcccgaacatcgat
gccagcctgcagcgactgcacgacggaacgggtcggtaactcaacaccga
cttcgacgctgtcgtgcagccctaccggcaggtgggtggagaagtgcgga
cgcacagcagcggcaggatcgaggcggtagcgatcgatacgggtgcaccgc
gagctggatacccagtcgggtgccgcccagccggtagtaaccacgaaatt
gccaccggtttgccactcgcaccgactcgggtgctgctggtcgcgacgtcgg
tcagtgagaacgcccggcgccaaacccagaccgtgcactggaacttgcgg
ctcgatgtctccgatgtggacggcaagctgatgatctccgggttgagtc
gattcgatga

mtsp19

atgaagatggtgaaatcgatcgccgcaggtctgaccgcccggcgtgcaat
cggcgccgctgcggccggtgtgacttcgatcatggctggcgcccggtcg
tataccagatgcagccggtcgtcttcggcgcgccactgccgttggaaccg
gcatccgcccctgacgtcccagccgcccagttgaccagcctgctcaa
cagcctcgccgatcccaacgtgtcgtttgcgaacaagggcagtcgtggtcg
agggcgccatcgggggacccgagggcgcgcatcgccgaccacaagctgaag
aaggccgcccagcaggggatctgccgctgtcgttcagcgtgacgaacat
ccagccggcgccgcccgggttcggccaccgcccagcgtttccgtctcgggtc
cgaagctctcgtcgccggtcacgcagaacgtcacgttcgtgaatcaaggg
ggctggatgctgtcacgcgcatcgccgatggagttgctgcaggccgcagg
gaactga

mtsp20

atgaacctacggcgccatcagaccctgacgctgcgactgctggcgccatc
cgcgggcatttctcagcgcccgcccttcgccgcccagcacaggcaaacc
ccgtcgacgacgcgttcatcgccgcgctgaacaatgccggcgctcaactac
ggcgatccggtcgacgcccgaagcgctgggtcagtcgctcgtcccgatcct
ggccgagcccggcggggtcgtttaacaccgcggtagccagcgttgtggcgc
gcgcccgaaggcatgtcccaggacatggcgcaaaccttcaccagtatcgcg
atttcgatgtactgcccctcgggtgatggcagacgtcgccagcggcaacct
gccggccctgccagacatgccggggctgcccggttcctag

mtsp21

atgagagttgtgtcaacgctactcagcattccggtgatgatcggcttggc
gggtccggcccacgcggggcccagcggtgacgacgcgggtctttcttgctt
cgctagagcgggcaggcattacctacagccaccggatcaagccatagca
tcgggcaaggccgtatgcgcgttagtcgaaagcggcgaatcgggtcttca
ggctcgtcaacgagctgcggacccgcaatcccgggttttcgatggacgggt
gttgcaagttcgtcgcgatctccgcgcatgtctattgccccaccagatc
actaaaaccagcgtcagcgcgaaatag

FIG. 2 (continued)mtsp22

atggcccgacgcttgcggtgcgcgcatcggcgggactcgtcgcggtat
ggcaatggccgcatcacgctcgacactggggcccgccgaaaccggtg
agcaattccccgggatggggtgtttctcgagggaactgacattgcgcca
ggcacctaccgacggaggggcccgtcgaatccccttattttgggtgttcgg
caggggtgcccagctctcaacctgctcatgggtcgacacacagcgcacccg
aggtgagcaatgagaacattgtcgacaccaacacctctatgggcccgatg
tcagtgggtgatcccgccgaccgtggcagccttcagacgcataactgcaa
gctttggatgcggatctcatag

mtsp23

atgttatcgccggttatcgccctcgcatatcgacagcgttcaccactgcagt
cggcgcccgccgcatcggacttgccgtcgccaccgcccggcaccgcccggc
ccaacaccaaaagacgaagccttcattgctcagatggagtcatttggcgct
accttctcctcaccgcaggtggccacccagcaagcccagctgggtctgcaa
gaagctggccagcggcgaaaccggcaccgagatcgccgaggaggtcctca
gccaaccaaactgaccactaagcaggcagcctacttcgtcgctcgacgca
accaaggcctactgcccgcgaatacgccagccagctcacctag

mtsp24

atgacgacgatgattactcttcggcgacgggttcgcggtggccgctcgccgg
cgtcgccactgccgcgcgacgaccgtcacctgggtcccgcaccagcaa
atgccgccgatgtctatggcgcaattgcctactccggcaacgggtcgtgg
ggccgatcgtgggactaccaacccggggcggtgccgaagccaccgcccgt
caagtctgtgtggtactccgactgcaaggtgctcaccagtttcaccgcct
gcgccgcccgtcgccgccaacgatagggcataaccaggaggaggttggacc
accttggccgcccgcctgaaggacgccctgaccaagctcggcggcggtta
catcgacacctgggcctgcaactaa

mtsp25

atgacaccgggtttgcttactactgcgggtgctggccgaccacgtgacag
gtgcgccaggatcgtatgcacgggtgttcacgaaaccgcccgttgtcgca
ccatgtttgtcgcggtgttgggtctgtccaccatcagctcgaaagccgac
gacatcgattgggacgccatcgcgcaatgcgaatccggcggcaattgggc
ggccaacaccggtaacgggttatacgggtggtctgcagatcagccaggcga
cgtgggattccaacgggtggtgtcggggtcgccggcgccgagtcgccag
caacagatcgaggtcgagacaacattatgaaaacccaaggcccgggtgc
gtggccgaaatgtagttctttagtcagggagacgcaccgctggggtcgc
tcacccacatcctgacgttcctcgcgccgagactggaggttgttcgggg
agcaggggacgattga

mtsp26

gtgcaaggagccgttgctgggtctgggtgtttctggccgctcctgggtgatttt
cgccatcatcgtgggtggccaagtgggtggcgctgatcccgcaggcggagg
ccgcggtgatcgagcgggtgggtcgctatagtcgtacggtcagtgggcag
ttgacgctgttgggtgccgttcacgcaccgctccgggctcgggtggacct
gcgcgagcgggtgggtgtcggttcgcgcgcaaccgggtgatcacccaggaca
acttgacgctgaacatcgacaccgtcgtctacttcagggtgaccgttcgc

FIG. 2 (continued)

caggcgggcggtgtacgagatcagcaattacatcgtcgggggtcgaacagct
caccaccaccaccctgcgcaacgttgtcggcgggatgacgctggagcaga
cgttgacctcgctgaccagatcaacgcccagctgcgcggcggttctcgat
gaggcgaccggccgctgggggtctgcgggtggcgcggtggagctgcgcag
catcgatccgcccgcgtcgattcaggcgctcgatggaaaagcagatgaagg
ccgaccgggagaagcgagcgatgattctgaccgccaaggtaccggggag
gcggcgataaaaacaggccgaggggcaaaagcaggcgagatcctggccgc
cgagggcgccaagcgccgcatcttggtgctgaggccgatcggcagt
ctcggtgctgcgcgctcagggtgagcgcgccgcggcctacctgcaggcg
caagggcaggccaaggccatcgagaagacgttcgcccgcatcaaggctgg
ccggcccaccccgagatgctggcctaccaataacctgcagacgctgccgg
agatggcgcggtggggacgccaacaaggtatgggtgggtgccagcgacttc
aacgcccgcactgcaggggttcaccaggctgctgggcaagccgggtgagga
cgggggtgttccgggttcgagccgtccccggtcgaagaccagcccaagcacg
cggccgacggtgacgacgcccaggtcgccggctgggttctccaccgatacc
gaccgctcgatcgctcgggcgggtggctacagccgaggcgatagcccgcaa
gccggtcgaggggttcgctggggacgccccccaggttgactcaatag

mtsp27

ttgcagacggcgcacaggcgctttgcccgcggcattcgcgggcggtgctttt
ggccggtgtgtgcctacctgcaaacaccgcggcagccgacgacaagctac
cgctggggcggtgggtgcgggcatcgctcgtaacggggacaccatgtgcacc
ctaaccaccatcgggccatgacaagaacgggtgacctcatcggttcacttc
cgcccactgtggggggcccgggcgcgagatcgccgctgaggggtgccgaga
acgcggggcccggtaggcatcatggtcgccggcaacgacggcctggactac
gcggtgatcaagttcgacccggccaaggtgaccccggtggccgtcttcaa
cgggtttgcgatcaacggcattggcccggacccgctcggttcggccagatcg
cctgcaagcagggccgcaccaccggtaactcggtgcgggggttacctggggg
ccaggggagagtccgggcacccttgtgatgcaggtctgcggcggaaccggg
cgactccgggtgcgcgggtgaccgtcgacaatctgctggtcgggatgatcc
acggcgcatcagcgacaatctgccgagttgcatcaccaaatacatcccg
ctgcacaccccgcggtgggtgatgtcgatcaacgcccagctggccgacat
caacgccaaagaaccggccggggcgcgggattcggtcccggtaaccggcctga

mtsp28

atgcttatgcctgagatggatcgctcgccgaatgatgatgatggcggggtt
cggcgccctgggtgccgcgcttcccgcgccgacagcctgggcccagccgt
cccggccggcgccgcgggtggtcgacaccggcgcccgcgcgcgggt
gcggcaaccgggtgggttttgttccacgacgagttcgacggggccggccgg
ttcggtcccggaccctccaagtggcaggtgtcgaaccaccggacgccc
tcaagaacccgggtgggtttgaccggccccagtttttggggcagtaccgc
gacagtgcacagaacgtgttctcgacggcaactccaatctcggtgctgcg
cgctacccgagagggcaacaggtatttcgggtggcctggtccacggcctgt
ggcggggtggcatcgggaccacctgggaggccccggatcaagttcaactgc
ctgggtccgggcatgtggcccgcctgggtggttgtccaatgacgatcctgg
tcgcagcggcgaaatcgacctgatcgagtgggtatggcaacgggacttggc
cgtcgggaaccacggtgcacgccaaccggacggcaccgcatcagagacc
tgcccgatcggtgtggacgggtggttggcacaactggcgcgctcacgtggaa
tccgagcggcatgtacttctggctggattacgccgacggcatcgagccct
acttctcggttccggcgaccgggaatcgaagacctcaacgagcccatccgc

FIG. 2 (continued)

gagtggccggttcaacgaccccggtacaaggtgtttccggtgttgaaacct
tgccggttggcgggttctggtggcggcgatcccgcgacgggttcctatccac
aggagatgctcgtcgactgggtgcgcgctctttaa

mtsp29

gtgcaccgtcgaacggccctgaagctcccgtgctgctggcggcaggcac
ggtgctgggccaagcgccgccccgcgccgaagaaccaggccgggtggt
cgccgacgcgcacatcgctggtatcaagcgacggctggctcgtcgggt
gcaaactacatcacctcgaacgccatcaaccagctcgagatgttccagcc
aggcacatacgatccccggcgcacgacaacgagctgggccttgccgcggt
ttcacgggttcaacaccgtgcgagcttctcctccacgacctgctgtgggccc
caagacgcgccccgggtttccaaaccgggtcgcgcagttcgtcgccatcgc
ggcgcgataccacatcaaaccgctcttctgctgttcgactcctgctggg
accgctccccagaccgggtcggcagcgggcccgaagggtgggggtgcac
aactccgggtgggtgcaaagtcgggtgctgaacgcctcgatgaccgccc
ctatgccagcacgctgtacaactacgtcacgggtgtgttgggccaattcc
gcaacgacgatcgcggtgttgggttgggacctgtggaatgaaccgcacaat
cccgcgcgcgtgtatcgcaaggtggaaggaaagacaagctcgagcgcgt
cgcgagctcctcccccaagtgttccgatgggcccgcacggctcgatccgg
ttcaaccgctgaccagtgggtgtctggcaagggaattggggagatcccgga
cgccgcagcaccatcagcgccattcaactcgacaacgcccagctgatcac
cttccacagttacgcgcgcggccgaattcgagggccgcacatcgctgagc
tcgctccgttgcagcggccaatcctgtgcaccgagtagctggcgcgggtcc
caaggcagcactgtcgaggggaatcctgccgattgctaagcggcacaacgt
tgggtgcgttcaattgggggttgggtggcgggaaagactcagacctatttgc
cgtgggattcgtgggatcacccctaccgcgcgccccgaagggtgtgggtt
cacgacctgtacaccccaacggccggccggtatcgggacggcgaagttca
aacgattcggaagctgaacggggatgccgagccaggactag

mtsp30

gtgtccacgtacgggtggcgcgcctacgccctgccgggttctgatgggtgct
gaccacgggtggtggtgtaccagacgggtgaccgggacgagcacgccaaggc
cgcggcgcccccagaccgtccgggactcgccggccattggtgtggtgggg
accgcgatcctcgacgcaccgcctcgcgggtcttgcaagtgttcgatgccaa
tctgcggccgggacgctgccggatggcggccccgttcaccgaggctggtg
acaagacctggcgtgtcgttccgggcactactccccaggtcgggtcaaggc
accgtcaaagtgttcaggtataccgtcgagatcgagaacgggtcttgatcc
cacaatgtacggcgggtgacaacgcattcgcccagatgggtcgaccagacgt
tgaccaatcccaagggttggaaccacaatccgcaattcgcggttcgtgcgg
atcgacagcggaaaaccgcacttccggatttcgctggtgtcgccgacgac
agtgcgcgggggggtgtgggtacgaattccggctcgagacgtcctgctaca
accgctcgttcggcggcatggatcgccaatcgcggtgttcatcaacgag
gcgcgctgggtacgcggagccgttccattcgaagggtgacgtagggttccta
tcggcaatatgtgatcaaccacgaggtcgggtcatgccatcggttacctgc
gccacgagccgtgcgaccaacaaggcgggtctgggtccggtaatatgatgcag
cagacgttttccacctccaatgacgacgcggccaagtttgacccccgactt
cgtaaggcggatggaaagacctgccgattcaatccctggccctacccga
ttccctaa

FIG. 2 (continued)mtsp31

atgcggtccctattacatcgccatcgtgggctccgggcccgtcggcggttctt
cgccgcggcatccttgctgaaggccgcgcgacacgaccgaggacctcgaca
tgcccggtcgacatgctggagatgttgccgactccctgggggctgggtgcgc
tccgggggtcgcgccggatcaccccaagatcaagtcgatcagcaagcaatt
cgaaaagacggccgaggacccccgcttccgcttcttcggcaatgtggtcg
tcggcgaacacgtccagcccggcgagctctccgagcgctacgacgccgtg
atctacgcggtcggcgcgagtcgatcgcatgttgaaacatccccgggtga
ggacctgcccgggagtatcgccgccgtcgatttcgtcggctgggtacaacg
cacatccacacttcgagcaggtatcacccgatctgtcgggcccggggcc
gtagttatcggcaatggaaacgtcgcgctagacgtggcacggattctgct
cacccgatcccgacgtgttgccacgcaccgatatcgccgatcacgctttgg
aatcgctacgcccacgcggtatccaggaggtgggtgatcgctcgggcccga
gggtccgctgcaggccgcgttcaccacgttgaggttgccgcgagctggccga
cctcgacgggggttgacgtgggtgatcgatccggcggagctggacggcatta
ccgacgaggacgcggccgcggtgggcaaggtctgcaagcagaacatcaag
gtgctgcgtgggtatgcccgaaccgcccgggacaccgcccgcgt
gggtgttccggttcttgacctctccgatcgagatcaagggaagcgcaag
tgagcggatcggtgctgggcccgaacgagctgggtctccgacggcagcggg
cgagtgccggccaaggacaccggcgagcgcgaggagctgccagctcagct
gggtcggtcggtcggtcggttaccgcccgggtgcccacgcccgggctgcgt
tcgacgaccagagcgggaccatccccaacgtcggcggccgaatcaacggc
agccccaacgaatacgtcggtcggtggatcaagcgcgggcccgaaccgggt
gatcgggaccaacaagaaggacgcccgaagacaccgtcgacaccttgatca
agaatcttggaacgccaaggagggcgccgagtgcaagagctttccggaa
gatcgtggcaccaggtggccgactggctagcagcacgcccagccgaagct
gggtcacgtcgcccactggcaggtgatcgacgctttcgagcggggccgccc
gcgagccgcacgggctccccgggtcaagttggccagcctggccgagctg
ttgcggattgggctcggctga

mtsp32

gtgacaaaaccaccgtggactgtcgatgttgtcggtgggcccgggctt
cgccggggtggccgcggcccgcgagctgacgcgacagggtcacgaggtgc
tggtgttcgaaggccgcgatcgggtgggcccgcgtcgtaaccgggtcgc
gtggcaggggtgcccgcggatattggcggtcggttcacgcccgaacca
agacgccgtgctggcgttgccaccgagctggggatcccgaacccccga
cccaccgcgacggcccgaacgtcatccagtgccgggggatcggcacgcagc
tatcggtggcaccatccccaaagctgtcgctgaccgggctcatcgacatcgg
ccggttgcggttggaattcgagcgaattgcccgcggcggttccggtggccg
ccccctgggatgcccggcgcgcgctgaactcgacgacgtgtcgctcggg
gagtggttgcgcttggtgcccgcacatcgctcctcgccgaacctgatggc
catcatgaccgggtgacctgggggttggtgagcccagcagatgtctcgatgc
tgacgcccgcctacgtacgcgcggccggcgccctggaccggctgctc
gacgtcaaaaatgggtgcccagcaggaccgtgtgcccgggggggacacagca
gatcgcccaggcggccgcgcccgaactcggcgcacgcgtcctgctcaacg
ccgcgggtgcgtcgcatcgaccggcagggagcgggtgtgacgggtcacgtcc
gatcaggggtcaggccgaggccgggttcgtcatcgctcgccattccaccggc
ccatcgcggtggccatcgagttcgatcccccgctgccgcccgaatatcagc
agctcgcccaccattggccgcagggccgggtgagcaaggcctaagcggcc
tattcgacgccgttctggcggggccagcgggtattccggccaggcgctgtc
cgatgaggcgccgggtgttcacaccttcgacgtcagtcgcgacgcccagc

FIG. 2 (continued)

ggccaggcat tctgatggggttcgtcgatgctcgcggttcgactcgcta
cccatcgaagagcgccgcgcatgcattgctgctttgctcgctgtt
cggcgacgaagcgctcgaccccccttgattatgttgactatcgttggggtg
cagaggaattcgcgccgggtgggtccgaccgcggtaccgcccgggtcg
tggacgaaatacgggtcactgggttacgtgagccgggtcggtccgattcactg
ggcgagcactgagaccgcggaacgaatggaccgggtatttcgacggcgccg
tcagatccgggtcagcgtgcccgcgcgagggtcgccgccctgctatga

mtsp33

atgaagggaacaaagctggctgttgtcgtcgccatgacgggtggctgccgt
tagtttggcagcgccggcgaggccgacgactacgacgcccccttcaaca
acacgatccatcgcttcgggatctacggcccgcaggactacaacgcttgg
cttgccaagatcagctgcaacgggtgagcagaggcgttgacggcgatgc
gtacaagtccggccactttcctgcaacgcaacctgccgcgcggaaccacc
agggccaagcggtttcagttcctgggcgccgcgatcgatcactactgccct
gagcatgtgggcgtcctgcaacggggtggcaccgcgttaa

mtsp34

atgaaagccctgggtggccgtgtcgcggtggccgtcgctcgactgctcgg
tgtatcttccgcccagctgatcccaggcggtatcccggcgaggtgagg
ccaactatgggtggcccccaagttccccacgtcttgtcgatcacaccgaa
tgggcgagtggtgggaagtctgcccagcctccgggtctaccggtcccaagt
tgggcgtacagcctcccgcgcctcgggatggccgtgcccgcgcggcct
gggcccaggttctcgcggtgtcaccggaggccgacactgccggcatgcgc
gcgagttcatctgccactggcagtagccgaaatcagacaaccgggcaa
accagctggaacctcgagccgtggcgccgggtcgctcgacgactcggaga
tgttggcttccggctgcaatccgggcagccctgaagagtcgttttag

mtsp35

atgagtgagcgccaccgtaagcccaccacatccaacgtcagcgtcgccaa
gatcgcccttaccggcgagtagctcggtggcgccgcatcgccatggcgg
ctcaggcgaccgcgccaccgacggggaatgggatcaggtggcccgtgc
gagtcgggcggaactgggtcgatcaacaccggcaacgggtacctcggtgg
cttgaggttcaactcaaagcacctgggcccgcacatgggtggcgaggttcg
ccccgtcgggtcagctggccagccgggagcagcagattgccgtcggtgag
cgggtgctggccaccagggtcgcgccgcccgtggccgggtgtgcggccgcgg
gttatcgaacgcaacaccccgcgaagtgttcccgttcggcgagcgatgg
acgtccgttggacgcggccgcgggtcaacggcggaaccagaccgctggcc
ccgcccggcgccgaccggcgccaccctggaacttgccgctaaccgacct
gcccgcaccgctgggtgaacccctcccggcagctcccggcgaccggcac
caccggccgacctggcaccacccgcgcccgcgacgtcgcgccaccggtg
gaacttgccgtaaacgacctgcccgcaccgctgggtgaacccctcccggc
agctcccggcgaccggcaccacccgcgacgtggcaccacccgcgcccgc
ccgacctggcgccaccggcgcccgcgacctggcgccaccggcgcccgc
gacctggcaccacccgtggaacttgccgtaaacgacctgcccgcgcccgt
gggtgaacccctcccggcagctcccgcggaactggcgccaccggcgatc
tggcaccggcgctcgccgacctggcgccaccggcgcccgcgacctggcg
ccaccggcgcccggcgaactggcgccaccggcgcccgcgacctggcacc
accgctgcgggtgaacgagcaaacggcgccggggcgatcagcccggcacag

FIG. 2 (continued)

ctccaggcggcccggttggccttgccaccgatttggaaactccccgagccc
gaccccccaaccagctgacgcaccgcccggcgacgtcaccgaggcgcc
cgccgaaacgcccccaagtctcgaacatcgctatacgaagaagctgtggc
aggcgattcgggcccaggacgtctgcggcaacgatgcgctggactcgctc
gcacagccgtacgtcatcggtga

mtsp36

atgtccggacaccgcaagaaggcaatgctcgccttggcggctgcgtcgct
ggcagcgacgctggccccgaacgcagtcgcggccgcagaaccgtcgtgga
acgggagctacctcgtgacgttgtctgccaacgcgaaaaccggcaccagc
atggcggccaaccggccagagtatccacacaaagcgaactacacgttcag
ctcgcgctgcgcgtccgatgtctgcattgccaccgtggcgcgacgctccgc
cacaaaaaacgagttcatcccgcggccaatcgaatacacctggaatggg
actcaatgggtacgggagatcagctggcaatgggactgcctgctacccga
cggcacaatcgaatatgccccagccaaatcgatcacggcctacacgcccg
gtcagtagcgaatcctcaccggcgctctttcataccgatatcgccagcggc
acgtgtaaaggcaatgtcgacatgccagtgctcggccaaaccgatcgttgg
ctga

mtsp37

atgcggttatctgatagcgaccgcagtgctcgttgcgtgtggtcctgggtggg
ctggccggcggtggtgcgcccgcgtcatgcgccggcctgggaggcactg
tgcaggccggccagatctgccatgtgcacgcctcgggcccctaagtacatg
ctggatatgacatttcctgtcgactatcccgaaccagcaggcgctgaccga
ctacatcacgcaaaaccgcgacgggttcgtcaacgtcgcgcaggggtccc
cgctgcgagaccagccctaccaaattggacgccaccagcgaacagcacagc
tccggccagccgcgcaggccaccgcagcgtagtgctcaaattccttcca
ggacctcgggtggggcacatccgtccacctgggtacaaggccttcaactaca
acctcgcgacctcgcagcccatcaccttcgacacgttggtcgtgccgggc
accacgccactggacagcatctaccccatcggttcagcgcgagctggcacg
tcagaccggtttcgggtgcgcgatattgccttcgaccggcctcgaccggg
ctcactaccagaactttgctatcacgcagcagagtctgattttctacttc
gcccagggtgagctgctgccgtcgtttgtcggcgcttgccaagcccaggt
gcgcgcgacgcgccattccgccgctggcaatctaa

mtsp38

ttgaagaacgcccgtacgacgctcatcgccgcgcgattgccgggacgtt
ggtgaccacgtcaccagccggtatcgccaatgccgacgacgcgggcttgg
acccaaacgcgcgacggcccggtatgccgtgggctttgacccgaacctg
ccgcgggccccggacgctgcaccgctcgatactccgcccggctccggagga
cgcggggtttgatcccaacctcccccgccgctggccccggacttcctgt
ccccgcctgcggaggaagcgccctcccgctgcccggtggcctacagcgtgaac
tgggacgcgatcgcgagtgcgagtcgggtggaaactggtcgatcaacac
cggtaacgggttactacggcgccgctgcgggttcaccgcccggcacctggcggtg
ccaacgggtggctcgggggtccgcggccaacgcgagccgggaggagcagatc
cgggtgggtgagaacgtgctgcgttcgcagggtatccgcgcctggccgggt
ctgcggccgcgcgggtga

mtsp39

atgagcaccatcttcgacatccgcagcctgcgactgccgaaactgtctgc
aaaggtagtggtcgtcggcggggttgggtgggtccttggcggtcgtggccg

FIG. 2 (continued)

ctgcgggccggcgcgcggtctctaccggaaactgactaccactaccgtggtc
gcgtattttctctgaggcgctcgcgctgtaccaggagacaaagtccagat
catgggtgtgcggtcggttctatcgacaagatcgagccggccggcgaca
agatgcgagtcacgttgcaactacagcaacaaataccagggtgccggccacg
gctaccgcgctcgatcctcaaccccagcctgggtggcctcgcgacccatcca
gctgtcacgcgctacaccggcgcccggtcttgcaagacggcgcggtga
tcccaatcgagcgcacccagggtgcccgctcgagtgggatcagttgcgcgat
tccatcaatgggatcctccgccagctcgcccgacggagcggcagccgaa
ggggccggttcggcgacctcatcgaatcgcccgcggaacacctggccggca
agggcaggcagctcaacgaaacgctgaacagtttgctcgaggcggtgacc
gcgctgaacgagggccggggagacttcgttgcgatcacgcgaagcctggc
gctatttgctcagcgcgctctaccagaatgatcaacagttcgttgcgctca
acgaaaaccttgccgagttcacccgactgggtcaccaaataccgaccatgac
ttggccgacacgggtggaacggatcgacgacgttctcggcaccgtccgaaa
gttcgtgagcgacaacagatccgtgctggctgccgatgtcaacaacctcg
ccgacgcgaccactacactagtgcaccccgagccgcgggacgggtctggaa
accgcttgcaaggttgccgacctaagccagcaactcaacaaccttta
ctatccactgcacagctctctgggtgggccaagttcgtgttccccaacttcg
cgaacccaattcagctcatttgcaagcgtattcaggccggcagccgactc
ggctatcaggaatcgcccgagctgtgcgcgtagtacttggcaccgggttct
ggacgctctcaagttcaattacttgccgttcggctcaaaccggttcagtt
cggcgggccactttgcccgaaggaggtggcttactccgaggagcgggtccgc
ccgcccgggggtacaaggacaccactgtcccagggatcttctcgcgggga
cacacggttttcacacggcaaccatgaaccgggctgggtcggttgcgcccg
ggatgcagggtatgcagggttcagccgtttaccgcgaacatgctcaccgccg
gaatcgctggcagagctgctgggtgggtccggatattgcccccccgccgcc
gggaaccaacttgcccggaccgcgaatgcgtatgacgagtccaatccgt
tgccgcccgggtgggtaccgcgagcccgcggtccctcccgggtgcggggcgcc
acaggacagccaggcccgggccagtgga

mtsp40

atgaaacgcagcatgaaaagcgggtccttcgcgatcggtctggcaatgat
gctcgccccgatgggtggccgcgcccgggtcttgccggccgcagaccggcca
cgcgccgggtggattatcaacagatcacccagctcgatcgcgcgcggg
ctgtcgacgcgcgcggtgcccgttctctgggcccggcgggcatcagcgg
ccccacgcgcgccacccggtaccggcatcaacaccgtcggggttcgacgcct
ccggtttgatccagtagcctatgcccgtgcccgggttaaagctgccgcgt
tcttcgggccagatgtacaaggttgggcaaaaggtcctgccgcagcaagc
gcgcaagggcgacctgatcttctacggccccgaaggcacgcaaagcgtcg
cgttatacctcggaagggccagatgctggagggtgggcgacgtcgtccag
gtttcgccgggtgcgcaccaacggcatgacgccttacctgggtccgggttct
cgggacccagccgacgcccgtccaacaggcgccgggtccagccagcgccgg
tccagcaagcgcccgtccagcaagcgcccgtccaacaggcgcccgtccaa
caggcgccgggtccaacaggcgccgggtccagcaagcgcccgtccagcaagc
gcccgtccagccgcctcccttcggcaccgcgcgctcacgctaa

mtsp41

atgttactcgccgtttcgccgcctccatgggtggcaccaccttgactgc
cgctactttgggctggccgcactcggttcgcccgggaccgcccagcgcaa
gctcgaccgacgaagcgttccctcgcgagctgcaggcggacgggatcact

FIG. 2 (continued)

ccgcccagagcgcagcgcgcgccatcaaggacgcgcacgccgtctgcgacgc
cctcgacgaggggtcactcggccaaagcgggtcatcaaggcgggtggccaagg
cgaccgggtctgagcgcgaagggcgccaagacgttcgccgttgacgccgcg
tcggcctactgcccgcagtagctgacctcgagctaa

mtsp42

atggcggccatgtggcggccgacacggttgagctcggcgctgctgtcctt
cgggttgctgctcggcggactgcccctagcagcgcggcggttgggcggcg
cgactgaagaacccggcgccggccaaacccgggtgcgcgggtcgtggcg
ccgcaacagagttggaacagctgccgcgagttcatcgccgacaccagcga
aattcgccactgcacgctgcgcgacgggtgtccgtccccgtcgactacgacc
aaccgggtgggacacaaagcgaagtggcggtgatccgcgtccccgcgacg
ggacagcgattcggagcactgctggtcaatcctgggggacccggggcgctc
ggcggtcgacatggtcgccgctatggcacccgcgatcgccgacaccgaca
ttctccgcacttcgacctggtgggcttcgacccgagaggggtcggccac
tcgaccctgcgttgccggtgtgcacccgacgccgagttcgacgcgtaccg
gcgcgatccgatggccgactacagtccggccgggtgtcaccacgtcgaac
agggtctaccggcagttggcccaggactgtgttgaccggatgggcttcagc
ttcttggccaatatcggtaccgcgtccgtcgacgggacatggacatggt
tcgccaagcgttaggtgacgatcagatcaactacctcggatacagctacg
gcaccgagttgggcaccgcttacctggaacgggttcgggtactcatgtgcgg
gcatggtcctcgacggcgctatcgatccagccgttagcccaatcgagga
aagcatcagccaaatggcgggatttcagaccgctttcaatgactacgccg
ccgactgcgcccgtcgcgggctgccctctgggcaccgactcggcccag
tgggtcaaccgctaccacgcccgtggttgaccgcgtggtgcagaagccggg
taagacgtcggatccacgtggcctgagctacgcccgcgacgcgacgagggca
ccatcaacgcgctgtacagccctcagcgctggaagtacctgaccagtggt
ctgctggggctgcagcgccgagcgcgcggcgacttgctggtgcttgc
cgacgactatgacggccgggatgcagacgggcactacagcaacgaccagg
acgcgttcaacgcgggtccgggtgcgtcgatgcgcccacaccggccgatcca
gcggcctgggtggccgcccagcaacggatccgtcaggtcgccccgttcct
tagctacgggcagttcacccgatccgccccccgcgatctgtgcgcgctgt
ggccgggtgcgggcaacgtcgacgcgcgacccccgcggcgccggccgggggt
ggcaaggctcgtcgtggtgtccaccacccacgacccggccactccgtatca
gtccggggtagacctggcccgcagctggggcgacccgctgatcaccttcg
acggcacccaacacactgcgggtgttcgatggcaaccagtggtggactct
gcgggtgatgcactatttctcgacgggaccttgccgcccgcgaggtctgcg
gtgcgcgcctga

mtsp43

atgaagacaggcaccgcgacgacgcggcgaggtggtggcagtagctgat
cgccctcggttgccgggggcccgggttgcgctgctggccgaaccatcag
cgaccggcgcgctcggaccgtgcgcggccagcgaagtggcgaggacggtc
gggtcggtcgccaagtcgatgggcgactacctggattcacacccagagac
caaccaggtgatgaccgcgggtcttgcagcagcaggtagggccgggggtcgg
tcgcatcgctgaaggcccatctcgaggcgaatcccaaggctcgcatcggat
ctgcacgcgcttctcgcaaccgctgaccgatcttctgactcgggtgctcgct
gccgatcagcggcctgcaggcgatcgggtttgatgcaggcggtgcaggggcg
ccccccggtag

FIG. 2 (continued)mtsp44

atgtctcggctgagttccatcctgcgtgccggcgcggcatttctgggtct
cggcatcgccgctgcgacatttccacaaagcgcggcagccgactccacgg
aagactttccaatacctcgccggatgatcgcaaccacctgcgacgccgaa
caatatctggcggcggtgcgggataccagtcgggtgtactaccagcggta
catgatcgacttcaacaacctgcaaaccttcagcaagcgacgatcaaca
aggcgcactgggtcttctcgtgtcacccggcgggagcgccgagactactcc
gaacacttttacaatggcgatccgctgacgtttgcctgggtcaatcacat
gaaaatcttcttcaacaacaaggcgctcgtcgctaaagggaccgaggtgt
gcaatgggatacccagccggcgacatgtcgggtgtggaactgggcctaa

mtsp45

gtgaccaagcgcacataactcccatacgctcgatgggtgatctcttgggacctgagcca
atcctgttgcctggcgacagcgacgccgaagcgagctgcttgccaacgaaagtccgagc
atcgtcgcgccgcgcatccgtcggcgctcggctcgctggcggtgctcgccgaaggggcg
ctggccgacgacaagaccgtcacggcctacgcatacgcgcgtaaccgggtaccaccgcggc
ctggaccagctgcgcccctatggctggaagggttcggcccggtgccgtattcccaccag
cccaaccggggtttcctacggtgtgtggcgccgctggcgcgccgcagccgctatcgcc
gagaccgacgagtatggacgctgcctggatctgcttgacgactgtgaccccgcgggcccg
ccggcgcttgggctc

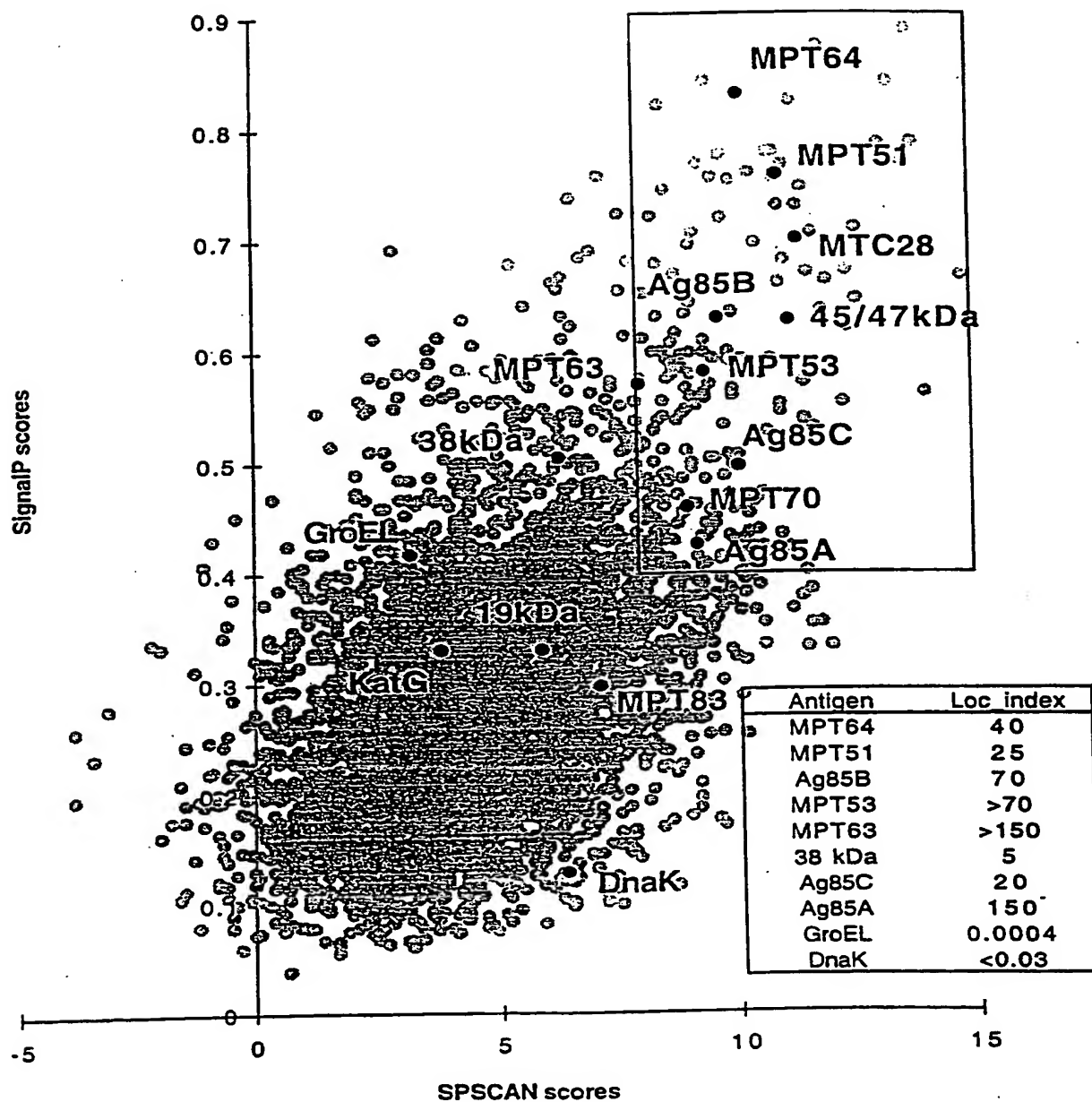
mtsp46

gtgatcatccctgacatcaatctgctgctctacgcggtcatcacccgattcccgcagcac
cggcgcgcgcatgcgtggtggcaagacaccgtcaacggccacaccgatatcgggctgacg
taccggcggttggttcgggttcctacggatcgccaccagtgcccgctgctcgccgcgcca
ctgccaaccgcggatgcgatcgccctatgtgcgcgagtggctttcgacgacgaacgtggac
ctactcacggcggggtccgcgcccactggacatcgcttgggcctgctcgacaagctcggc
acagccagccacctaaccaccgatgtgcaactggccgcctacggcatcgaatacgacgcc
gagatccattccagtgcacaccgactttgcccgattcgccgatctgaagtggaccgacccg
ttgcgcgaa

mtsp47

ttgactgatccgcgccacaccgttcgaatcgctgtcggagctaccgcgctcggcggtgtcg
gcactcgggggcaactctgccggcctgctccgcacacagcgggcccgggttctccccccagt
ggcccgctcagctcccgcggccgcgacccgtcatggtagagggacatacgcacacaatttcc
ggagtggctcagtgccgcacctcgccagcggtaaggacggcgacgccgtcggagtccgggg
actcaaactacacgggttaacgcacacgacgattcggcctcggtgacactgtccctgtcc
gactccacgccccagacgtcaatgggttttggtatctcccttaaaatcggaagcgtcgac
taccagatgccctaccagccggttcagtcaccaactcaggtcgaagcgaccaggcagggc
aagagttacacactgaccgggacgggtcacgcggtgatccggggccaaaccggcatgcgt
gagctgccgttcgggggtacatgtaacctgtccg



FIGURE 4